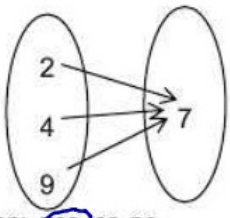
Sec I – Term 3 Name_____ ID: 1

Self-Check #11 – Functions Date_____Period_____

Determine if the following are functions. State the Domain and Range.

1.



function: yes or no

D: {2, 4, 9}

R: {7}

2.

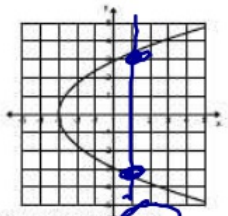
x	f(x)
0	0
2	1
4	3
6	9

function: yes or no

D: {0, 2, 4, 6}

R: {0, 1, 3, 9}

3.

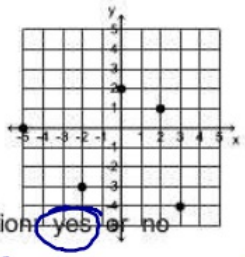


function: yes or no

D:

R:

4.

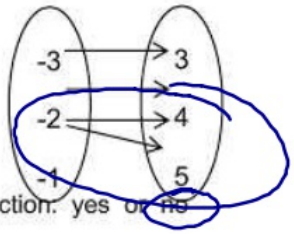


function: yes or no

D: {-5, -2, 0, 2, 3}

R: {-4, -3, 0, 1, 2}

5.



function: yes or no

D:

R:

6. {(-1, 1), (0, 0), (1, 1), (2, 4)}

function: yes or no

D: {-1, 0, 1, 2}

R: {0, 1, 4}

7. Math the statement to the graph.

a) Start out slow and slowing increase speed then stay at 35 mph.

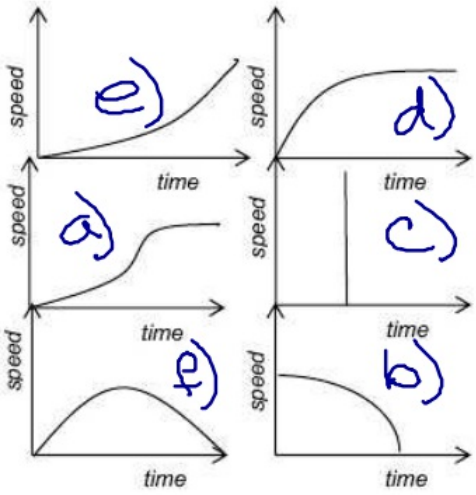
b) From 35 mph to a stop.

c) From 0 to 50 mph in 0 seconds.

d) Start out fast and then stay at 35 mph.

e) Start out slow and keep increasing speed.

f) Start out and then run out of gas.



8. A tree grows 2 feet every year. Create a table to show how tall the tree will be as it continues to age.

Independent: years

Dependent: height.

Discrete or Continuous

9. Generally, the average price of going to the movies has steadily increased over time.

Independent: time

Dependent: # priced tickets.

Discrete or Continuous

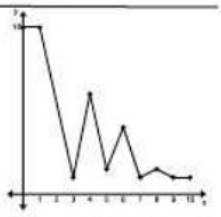
10. The air pressure inside a tire increases as the temperature increases.

Independent: temperature

Dependent: pressure

Discrete or Continuous

Bungee Jumping



Independent Variable: time

Dependent Variable: height.

y-intercept: 80 feet

What's Happening? up and down over time

11. For each domain,

a) state the slope and b) determine the equation of the line for the specified interval.

D: [0, 4] [hint: (0,) & (4,)]

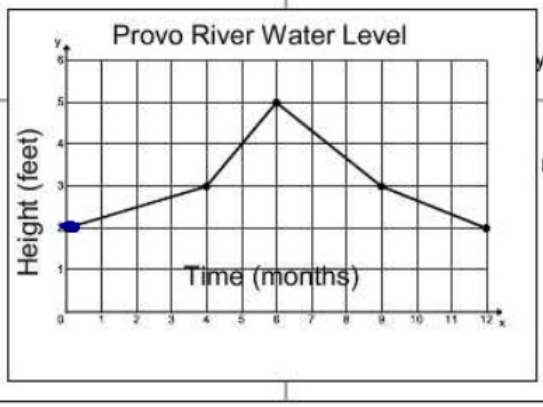
m = $\frac{2-3}{0-4} = \frac{-1}{-4} = \frac{1}{4}$

y = $\frac{1}{4}x + 2$

D: [4, 6]

m = $\frac{3-5}{4-6} = \frac{-2}{-2} = 1$

y = $1x - 1$



D: [6, 9]

m = $\frac{5-3}{6-9} = \frac{2}{-3}$

y = $-\frac{2}{3}x + 9$

D: [9, 12]

m = $\frac{3-2}{9-12} = \frac{1}{-3}$

y = $-\frac{1}{3}x + 6$